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Covered Containers and Serving Pieces

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Date May 19, 1969

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and Mr. Frans Wildenhain

This thesis is dedicated to my wife Beverly.
For without her it would not have been possible.

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Introduction

In the past my work lacked what I call discipline mainly because of the atmosphere I worked in. The word was seldom heard although I was very much aware of it. I came to the conclusion, after five years of complete freedom in my work, that if I wanted to be a well rounded potter I must be able to bring this discipline into my work. I was too involved in the aesthetic aspect and not the technical problems; these must be united.

This is the reason I chose covered containers as a thesis. The technical problem of covers would give me the discipline I needed and would help bring technology and aesthetics together.

I was brought up in an atmosphere in which we used what we had at hand and made the best of it. I've often thought of using materials that nature provided as glaze possibilities. This was my first opportunity to put this thought into practice. I wanted to know what could be done with local clays and vegetable ash used as glazes. If I could get satisfactory results I could use these in a studio situation. What could be more ideal than digging my own clays and raking my own ash. Nature provides so much for the potter that most don't take advantage of.

Glazes

One of the reasons I wanted to work with slip glazes was to prove to myself that affective glazes could be made from materials that are easy to obtain and costless. Clay isn't hard to find and usually can be obtained in most parts of the country. I have found that the best way to find clay deposits is to explore lake or stream banks, eroded road sides and sometimes digging a few inches below the top soil. Agricultural centers will sometimes help in locating clay deposits by use of soil maps.

While working with local clays as glaze possibilities, I had many problems and many satisfactory results. These will be discussed on the following pages. Before I begin I'd like to take this opportunity to thank Mr. Hobart Cowless for all his help and guidance. He has influenced me in many ways, all of which have helped me extend my technical knowledge about glazes, clay bodies and my work in general.

I knew from past experience that I would be fortunate if any of my local clays matured at stoneware temperatures. From the five different clays I worked with, I found two that matured at cone nine without the addition of other chemicals. I will refer to these five clays as A, B, C, D, and E. The location at which I found these clays are marked on maps in the appendix of this thesis.

Other chemicals were needed in order to adjust the clays that didn't reach maturity. I chose the most inexpensive

chemicals available. I wrote to several ceramic companys for price lists on chemicals and found the Ceramic Color and Chemical MFG. . Co., New Brighton, PA. to be the most reasonable.

I chose the following chemicals to work with:

Name	Price
1. Gerstley Borate	.13 - 100# lot
2. Cryolite	.20 - " "
3. Whiting	.06 - " "
4. Feldspar	.04 - " "
5. Petalite	.125 - " "

Before the clays were used as glazes they had to be refined. I started by drying the clays so that they could be ground to a fine powder. I then could separate any foreign matter such as stones or wood. The clay was then ready to use. Surprisingly, most of the clays I worked with had little foreign material. After making several glaze tests I found that the clays had to be calcined. Most of my clays would contract and expand at a different rate than the clay bodies. Calcining the clays allows two molecules of water to be given off which seems to prevent the shrinking problem. The process was done in the following manner. After the clays had been ground to a fine powder, I placed them in bisqued containers. I then fired them to cone 08. After the clay was fired, it gave the appearance of being a fine sand in texture. It was then put in a ball mill until again ground to a fine powder. I then mixed it with fifty percent of the same uncalcined clay. If I didn't do this, the calcined clay when mixed with water, would settle to the bottom and glazing would become very difficult.

My first attempt at testing a local clay as a slip glaze was a great success. I will refer to this clay as A. It had very little foreign material and calcining wasn't necessary. It matured at cone nine looking very much like albany slip in color and texture. Since I was interested in inexpensive glazes I didn't bother experimenting with other chemicals. I did use clay A in color experiments which I will discuss later.

Clay B wasn't as cooperative as A. It had to be calcined and it didn't mature without the help of a flux. When fired on a pot, the glaze became very dry and shivered. The addition of chemicals was done in the following manner:

<u>Clay</u>	<u>Grams</u>	<u>Clay</u>	<u>Grams</u>	<u>Clay</u>	<u>Grams</u>
B1	10	B2	10	B3	10
Gerstley Borate	1	Whiting	1	Cryolite	1
	2		2		2
	3		3		3
	4		4		4
	5		5		5

All clay-chemical experiments were done in this manner. In some cases, if the tests showed that further amounts of the chemical would improve the glaze, it was extended to ten grams.

I started by adding one to five grams of gerstley borate with clay B. The color range was from a light yellow to a bright yellow mat.. I have read that the color of slip glazes is brown to black so I was surprised and pleased with my results. This was the only case in which I obtained this color. Ten percent of gerstley borate produced the best results.

In my second test with clay B I used petalite as a flux. It is usually used as an auxiliary body flux to reduce thermal expansion. Petalite tended to shiver the glaze after the pot had been sitting for several weeks and in some cases months. Mr. Cowles suggested replacing it with a feldspar. I chose bainbridge feldspar and it solved my problem though it produced different appearances than did the petalite. Petalite tended to bring about a mat while the bainbridge produced more transparency. Both produced browns ranging from dark to very dark. Since B was very close to maturity at cone nine, only ten percent of bainbridge gave the best results.

I decided to perform one more chemical test with B before moving on. Mr. Cowles suggested using lithium carbonate. It caused the glaze to shiver violently and broke the pots into many pieces and in some cases a fine powder. Lithium carbonate produced very nice greens so I wanted to use it if I possibly could. I tried adding small amounts, one fourth to one half a gram. The shiver stopped but I couldn't bring about the color effects that larger amounts did.

Counter acting the lithium carbonate with cryolite was the next step. I performed many tests with this combination without success. The lithium had to be in large amounts in order to achieve the desired colors but the cryolite would not stop the shiver.

Clay C was very refractory at cone nine, looking somewhat like the moons surface. This clay was most difficult to achieve a satisfactory glaze from. Gerstley borate was the only chemical that had much affect on it.

In order to achieve a good glaze with whiting, more than fifty percent had to be added. A white speckled glaze was produced with sixty percent whiting. The larger the percentage, the whiter the glaze became, making it too fluid for a good glaze.

Cryolite didn't work well with Clay C. It didn't matter how much I added, the glaze wouldn't smooth out. It had a dirty brown color and a sandy texture.

As I mentioned before, gerstley borate worked very well with clay C. Even ten percent was enough to transform the clay into a good glaze. Ten to thirty percent produced a glossy black glaze with hints of reds and blues. Forty to fifty percent gerstley borate produced a dark green black celadon glaze which had a very nice craze. Any more than fifty percent caused the glaze to become very fluid.

The texture of the glaze from ten to fifty percent gerstley borate was smooth with slight pinholes. Apparently clay C lacked a strong fluxing agent. Gerstley borate is an active flux, more so than whiting or cryolite. Gerstley borate gave C the flux and glass former it needed to make it a good glaze.

Clay D matured at cone nine nicely. It had a firing range from cone five to ten without any additions. By itself

at cone nine it produced a pleasant light green with gold specks.

Additions of whiting brought about light ash looking glazes. Additions of gerstley borate also produced light green but made the glaze fluid. Cryolite changed the appearance of the glaze quite drastically. It became very mat and increased amounts produced a dark brown green with a somewhat rough texture.

After making these tests, I've come to the conclusion that clay D gives the best results when used by itself.

Clay E also matures by itself at cone nine looking somewhat like an ash glaze. Additions of whiting caused the glaze to become lighter in color and produced a spotted army green surrounded by yellow.

Unlike my previous glaze tests, gerstley borate and cryolite gave very similar results. Both produced a red brown mat. The only difference I detected was that cryolite produced a slight crystal effect. This clay had to be calcined but was very easy to refine and worked well with my pots.

The Rochester area contains chemicals such as talc, calcium, dolomite, flint, and iron so we can assume that the chemical makeup of these five clays should contain some or all of these chemicals. Since clays E and D make good glazes by themselves and were found close to each other, that area must have just the right proportion of chemicals to make a good glaze. Clays B and C also were found close to each other but didn't mature at cone nine. A flux and glass former was needed to produce a good glaze.* This area had an over load of alumina. Clay A was found about 75 to 100 miles from B,C,D and E. As mentioned before, it looked just like an albany slip glaze. It must contain silica, alumina and fluxes in correct proportion to function as a glaze. The clay was being trucked in for use as fill but no one knew where it was coming from.

By reviewing the test results on these five local clays we can come to some conclusions of the compositions of the clays relative to their response to additions and to their changes in maturity, texture, and color.

Clay A as I stated before matured by itself. It was a very good glaze. The only thing I can add is in respect to its color. To produce the black brown it did, we can assume that it had a high percentage of iron. Additions of gerstley borate caused the clay to become too fluid but produced a yellow color. This was caused by the calcium in the gerstley borate and in the clay.

Clay D and E also matured by themselves so I would like to discuss them before B and C. Both probably had similar chemical makeup being found about five miles from each other. Their RO , R_2O_3 and RO_2 factors are in balance as to make good cone nine glazes. Both produced greens but E was lighter than D. This means that both contain small percentages of iron. Clay E could have more calcium to result in bleaching the iron to make it lighter. When whiting was added to clay D the color looked very much like E. The higher the calcium content the lighter the glaze became.

Additions of cryolite, a source of alumina and a flux, caused the texture to become rough. D and E probably already had their limit of alumina.

Clay B didn't mature at cone nine. Gerstley borate gave the best results. B lacked a glass former and a flux. Gerstley borate produced a good texture and brought about yellow. We can assume that clay B had a source of calcium in order to produce this color. Clay B also had a good amount of iron. When feldspar was used it produced browns to blacks.

Clay C was more refractory at cone nine than B. Whiting or cryolite didn't help the clay mature as well as gerstley borate did. Clay C probably had no fluxing agent or glass former. Additions of cryolite gave the clay more alumina and didn't mature the clay at all. Whiting did mature the clay but at the point in which a good glaze was achieved,

the glaze became too fluid to use. By cutting back on the percentage of whiting and adding silica a good glaze was obtained. The whiting supplied the flux but not enough glass former. Gerstley borate gave the clay the right amount of flux and glass former. Gerstley borate is a very active flux and boron a good glass former so small amounts added to C developed a good glaze. Clay C produced light green hues. We can assume it had a small amount of iron in its makeup.

A chemical analysis report of clays B, C, D and E can be found in Mr. John Smolenski's thesis.

This ends my exploration of local clays used as glaze possibilities. Before I move on to the results of my ash glazes, I would like to mention three other clays I worked with very slightly. The location of these clays are marked on the map 1, 2, and 3. As you can see they are close to R.I.T and are easy to get at. I only mention these clays so that a student who is interested in slip glazes may find them easily without searching long distances from the school. All three clays work well as slip glazes and with more testing many good glazes could be developed.

I was curious about the affects obtained when adding varying amounts of colorants to my slip glazes. As stated before, clay A was used in these experiments. The colorants used are as follows:

1. Manganese Dioxide

2. Cobalt Oxide
3. Iron Oxide
4. Rutile
5. Copper Oxide
6. Bone Ash - to develop red

In these experiments five to twenty grams of colorant to one hundred grams of A was used.

Hoping to obtain a black slip glaze, I began experimenting with manganese dioxide. Five to seven grams produced a shiny opaque black glaze when applied in a thin coat. Larger quantities resulted in a wrinkled, half blistered surface.

Rutile produced very pleasing results. The range of color from five to ten grams was a warm, light, ochre brown to a dark brown. The glaze was very mat and pleasing to the touch.

Cobalt is a very strong colorant and the percentages used was far to much. I purposely used these large amounts to see what the lime content in A would do to the cobalt. It should produce a lighter and softer hue. Large quantities resulted in a loose sagging cover. It was unpleasant in appearance, hard to control, with the tendency of being very fluid.

After finding that these percentages didn't work, I performed tests using from one to four percent. Instead of producing blues, the glaze turned black. Unlike the manganese tests the cobalt tests were more mat.

Copper oxide was used in my next color tests in order to obtain the greens that lithium carbonate produced. Instead of green the copper seemed to disappear or burn away during the firing, so I decided to try another clay.

Clay B plus copper produced hints of green surrounded predominantly by brown. Mr. Cowles suggested I refire this test in a cone five oxidation cycle. This produced a cherry red hue. I made further tests of this sort and found that the quantity of copper didn't have much effect on the oxidized hue.

Mr. Cowles brought to my attention an article in the Journal and Abstract of A.C.S. which discussed the relation between the content of ferrous oxides and shades of iron glazes. An increase in Al_2O_3 and / or SiO_2 content deepens the shade of the glaze, eventually turning black. For the black glaze, MgO and a high content of Al_2O_3 and SiO_2 should be present. The ratio of FeO to total iron oxide is about 0.05 for the lightest and about 0.1 to 0.12 for the black glaze.¹

I began these experiments by increasing the silica content. The results of adding more flint made the glaze very dry and turned it lighter in color. Apparently clay A had its limit of silica.

The second test was done by adding increased amounts of kaolin. These tests resulted in turning the glaze darker

¹American Ceramic Society, Ceramic Abstracts, (1968)
p. 271 D

and more mat. Increasing amounts of kaolin, silica and iron produced a deep red to a dull black. I performed the experiments simply to prove what the article stated. They resulted in some very good glazes.

Clay A had hints of red in it when fired by itself. Mr. Cowles told me that additions of bone ash should help in achieving reds. I added ten percent to fifty percent bone ash to the clay. Twenty percent produced the best results. By adding ten percent silica and washing the pot with iron stain a purple red was obtained. The glaze can be seen in picture thirty five.

Ash Glazes

History of ceramics classes taught me that the ash glaze was first discovered by the Chinese during the Chou dynasty. It was produced by mistake. Wood was used as the fuel to heat the kilns and the draft carried the wood ash through the kiln. It settled on the pot and an ash glaze was developed.

The ash glaze was used more frequently during the Han dynasty but still wasn't mixed with the glaze. It was still developed by admitting the wood ash to flow through the kiln.

I worked with five different vegetable ashes. I will refer to these as A,B,C,D, and E. There make up is as follows:

Ash A	-	Banana skins	-	100%
" B	-	Hardwood	-	90%
		Paper	-	10%
" C	-	Wood	-	30%
"		Pine Cone	-	20%
		Paper	-	40%
		Walnuts	-	10%
" D	-	Maple leaf	-	100%
" E	-	Mixed hardwood	-	100%

I found that most of the ash combinations matured by themselves at cone ten but the texture was very rough. In order to adjust these ash glazes I used the same chemicals that were used for the clay tests. I also made experiments with additions of each local clay in combination with ash E which I will discuss later.

Processing the ash was done in the following manner:

1. Screen it to separate pieces of unburnt wood, nails and other undesirable material from the ash.
2. Soak the ash in a pan of water to separate the alkali content from the ash. The alkali will rise to the surface and can be easily drained off. Repeat this process two to three times. The only reason I could find for separating this alkali was to prevent it from burning hands when working with it later. I performed tests not separating the alkali and discovered that it doesn't make any difference on the color or texture of the fired glaze.
3. The ash is then left to be dried, after which it is ready to be used.

Most ash glazes that I have seen were green in color. Two out of the five ash types I worked with produced this green which I liked very much. I wanted a good range of colors so combined other chemicals besides the local clays. I was afraid that the clays would result in somewhat the same colors. Brown, yellow, black, red, and green were achieved by using other chemicals.

My first tests were conducted on banana ash in combination with gerstley borate and a feldspar-whiting combination.

Without the addition of gerstley borate, banana ash is dark brown in color after being fired. Small amounts of gerstley borate produced a color range from light to

dark green. Percentages over twenty caused the glaze to become very fluid.

Since banana skins are difficult to burn and so many are needed to produce a sizeable quantity of ash, I decided to make only one more series of tests before moving on.

I combined the ash with amounts of feldspar and whiting finding that forty percent ash, forty percent feldspar and twenty percent whiting gave the best results.

The color ranged from a light tan mat to light green. I discovered that this glaze worked well on small pots but on large pieces it shivered. I substituted whiting with cryolite and the shiver was absent.

Ash B matured very nicely at cone nine with a smooth texture and brown to green in color. Varying amounts of red art, clay A, petalite, lithium carbonate, and gerstley borate were used in experiments with ash B.

Twenty percent red art matured the ash and produced a warm red brown while fifty percent produced a glossy brown black finish. Clay A produced the same results.

Petalite produced a nice light green ash glaze with only ten percent. More than that would cause the glaze to become too fluid.

Needless to say, additions of lithium carbonate caused the glaze to shiver. Small amounts of gerstley borate caused the ash to become more mat.

The same experiments were used on ash C with the same

results. Undoubtedly, ash C and B were very similar in there chemical makeup. Ten percent of any chemical I have used matured C nicely.

Ash D like B matured at cone nine by itself with a poor finish. Again the tests previously mentioned were performed. The ash by itself was light tan in color. Additions of redart produced a brown background with light tan patches. Forty percent redart gave the best results.

Gerstley borate seemed to dry the maple ash turning it dark brown. Experimenting with one to fifty percent I could not develop a good glaze.

Petalite produced a very light tan. Very little difference in color was achieved from one to fifty percent. I extended the petalite to equal parts of petalite and ash. It caused the glaze to become very fluid. Instead of light tan the glaze became very brown with hints of green. Fifty percent petalite produced the best glaze.

Unlike the previous ash tests mentioned, I didn't use chemicals with ash E. Instead I used each of the local clays that I had found.

As I expected, there was little difference in color from one ash-clay test to another. All tests produced browns of various hue and not more than ten percent clay was needed to develop a good glaze. Larger quantities caused the glaze to become too fluid. Instead of looking

like an ash glaze, they gave the impression of being a slip glaze.

I performed color tests with my ash glazes by adding colorants such as iron, cobalt and manganese dioxide. The colorants didn't affect the glaze unless it was applied on a flat surface. The colorants caused the glaze to become very fluid and as a result the colorant would end up in a puddle at the bottom of the pot or on the kiln shelf.

Sulfates aren't as strong so I decided to make several tests with iron sulfate. It gave the glaze a brown tint which really wasn't such a great discovery. The same effect can be achieved by adding about forty percent clay to the ash.

One more test was performed with a slip that Mr. Cowles introduced me to. It consisted of equal parts barium, titanium and silica. Under the ash it produced a white glaze. The slip must be applied in a thin coat and the glaze must be fairly thick. This slip gives good results and was the only color series that satisfied me.

I'm very pleased and excited about the results of my tests with local clays and ash. I have learned many things from these tests and have become more familiar with the technical problems of glazes. Also I have had a chance to experience the temperaments of a gas fired kiln. I think I got the biggest kick from the fact that the glazes I developed were costless. It was really a good feeling

to be able to go out doors, dig a little clay, burn a little wood and apply these to ceramic forms which transformed them into something personal and beautiful to me. Working with Mr. Cowles and my fellow classmates, I can easily say that this has been the most rewarding year of my life.

Pots

Not having much experience at making thrown covers, I began making as many different types and shapes of containers and covers as possible. I also found time in the evenings to draw. Although most were unrealistic for wheel thrown forms, they gave me fresh ideas. Ideas came at odd times and as soon as one did, I quickly scribbled it on any scrap of paper I could find. I now find that ideas come from making a series of pots. The last pot thrown gives birth to a new idea which is then immediatly tried. In this way a new pot is made and a different idea is executed. I'm now using this method rather than drawing as much as I used to. I have many drawings of pots that I haven't tried and may never try. This new method allows me to execute the idea immediatly.

Simple cylinders were my starting point. I adopted covers to those that fit on, in, and over the lip always looking for a direction to go or a combination of cover and pot which I felt had the potential of being further explored. When a combination was found I usually made a series of them, each time changing the form slightly. I always tried to consider the cover, lip, shoulder, belly and foot of the pot as one form. In other words, by changing one of the parts slightly I tried to make them compatible in order to result in a simple but strong, bold pot.

Usually after a pot was made, I then thought about how it was going to be glazed if at all. I never make a pot to fit a certain glaze. The pot is the most important thing. The glaze is used to make the pot more usable and to add to its character. The glaze can also be said to be a form of decoration. I find in most cases that unnecessary decoration becomes an after thought and doesn't make a pot a better thing. I've always tried to be honest and direct in my work and never marred or decorated a pot unless with tool marks and finger marks which result during the process of throwing. I feel that this type of decoration shows how the pot is made and isn't covered by some sort of decoration that doesn't have anything to do with the clay or the form of the pot. I also believe that the clay body be exposed and not entirely covered by the glaze. On November 20, 1968, Mr. Wildenhain and I had a talk about the same subject. Here are some notes taken after our meeting. Frans stated that unnecessary decoration destroys the freshness of simplicity of a pot unless it is done unintentionally or without contemplation. I then felt very good because I believed the same thing.

Getting back to covered containers, function entered the picture. This is something I hadn't thought about in the past since most of my work was sculptural. I have since come to the conclusion that a pot should have some functional value besides being aesthetically pleasing. If a pot doesn't

have a function, I would categorize it as being sculpture.

I can now see how much more beautiful a tea pot can be if it functions well. Many tea pots are beautiful but without function. I have found myself keeping a tea pot in which the cover is stuck or one which doesn't pour well. I kept these just because I enjoyed looking at them but a beautiful tea pot that can be filled with tea, picked up and poured is a great joy. So function had to be something that became automatic in my thinking. When making casseroles, frying pans, and gravy boats I discovered that the piece had to be made for its specific function, which in a way hinders aesthetic expression and design becomes more important.

Storage containers gave me more freedom to express myself than the serving pieces I worked on. I'm afraid that my first storage containers weren't very functional. I had a lot of trouble with the clay body cracking and warping during the glaze firing which was very discouraging and embarrassing. I had no trouble of this sort with small pots. Although this problem existed, very much was learned from these pots. I think this was a break through for me both in form and technique. I had finally found forms and shapes that half-way pleased me. This has happened only once before in the past. When thinking about it now, I may have been trying too hard at first. I didn't feel at home or relaxed as yet. It didn't take long to overcome this with the help of my classmates.

These storage containers were quite large and I soon learned how to deal with large amounts of clay. Comparing it to small amounts, I found that everything had to be exaggerated. More clay was being used so more clay had to be brought up. The walls had to be thicker. More clay had to be left at the top to carry the cover and more at the bottom to support the foot. I enjoyed throwing large pieces and felt very comfortable doing it.

I was confronted with a very difficult problem while working on these large containers. In order to move or carry them, handles had to be adapted. They became a terrible barrier for me to conquer. Technically the problem was simple. Practically any protrusion from the side of a pot can be used to help carry it. Aesthetically the problem was very difficult. At first every handle I tried looked foreign to the pot. I tried pulled, slab, and coil handles but only a few worked. The handles must be a part of the pot as a branch is to a tree.

I decided to stop banging my head against the wall and approach the problem in a different manner. I planned to use different materials for the handles such as wood, metal, or plastic. The only material that would complement my pots was rope. I started by making the same mistake I had made before. The handle became an afterthought instead of an aesthetic and functional outgrowth of the pot. Frans didn't think much of this solution but it was something I had to do

in order to conquer the problem of clay handles and it worked. I must give Frans the credit for getting me over the hill. He made me realize that it didn't matter what material I used it was how I used it.

After finishing this series I made many large containers using clay as handles. I found it much easier now although at times it still becomes a problem.

Tea Pots

I always get a big kick from making tea pots and was looking forward to this part of my thesis. Beginning with the experimentation of body forms, I found that a pot with a full belly worked very well for this purpose. My next step was the problem of spouts. I spent two days throwing just spouts until I felt satisfied with what I was making.

I found two types of covers that worked well and didn't have the tendency of falling out when the tea pot was tipped. Both rested on the lip but protruded well below.

My next step was the exploration of handles. I adapted handles on the backside, on top, and on the left and right-side of the body. I also developed a chalice-type tea pot by which the base served as the handle. This worked very well, but one hand had to be used to hold the cover from falling out.

Frans gave a lecture on tea pots during the time I was

working on them. He showed us a variety of them by previous students. All were different and all functioned well. This showed me that there isn't one specific way to make a tea pot but many ways. His lecture helped me immensely. Pictures of my tea pots can be seen on pages 26, 28, and 32.

Casseroles

Before starting this stage of my thesis I decided to look at as many different styles of casseroles as possible that were on the market. None seemed to be made with any feeling, looking like the machine that made them.

Frans also talked to me about casseroles before I started to work. He introduced me to the simple shaped, old style, French casserole. He also explained the seasoning process for new casseroles in which vegetables and warm water are combined and stirred in the pot. He stated, "Casseroles are like people, in that they have to be conditioned for what is in store for them in the future."

I started by developing a clay body that would stand up to the heat of the oven. This body consisted of fifty parts gold art, twenty five A.P.Green, twenty five spodumene, and thirty ball clay. This body worked well for casseroles but I never found a chance to test it as a flameware possibility.

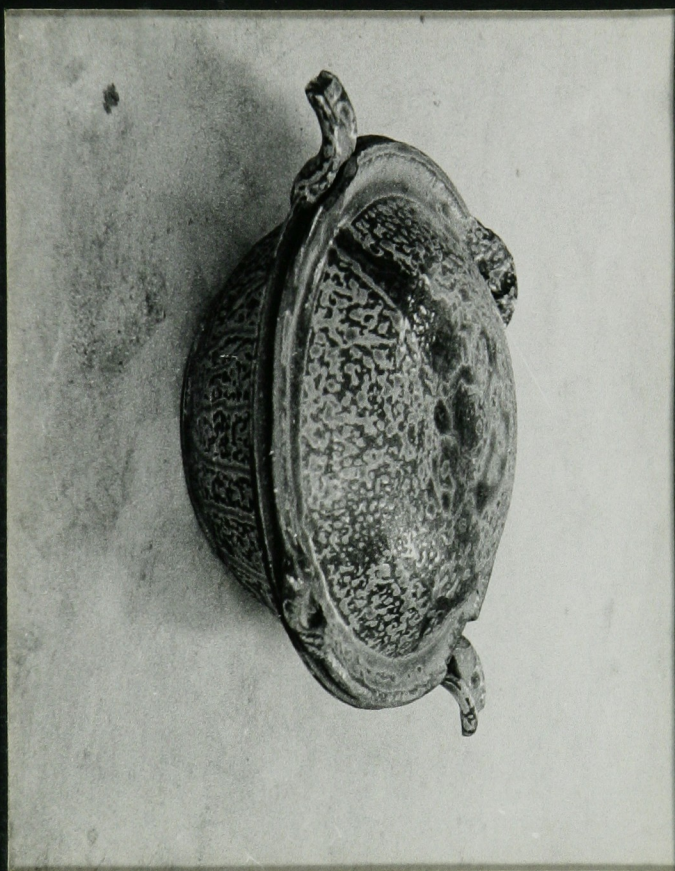
After this body was developed, I then started making casseroles. Using the simple French style I adapted different

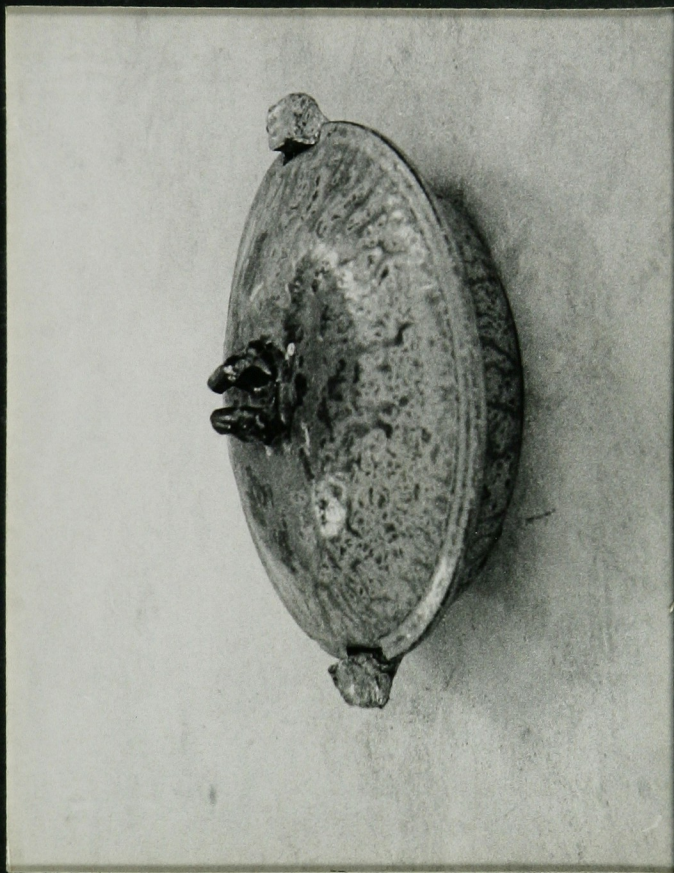
types of covers. I was most satisfied with a cover that rested on the lip with a doomed top which could be used with or without a handle. By extending the edge of the cover beyond the lip it could be easily lifted. Pictures of these and other types of casseroles can be seen on pages 29, 30, 31, and 35.

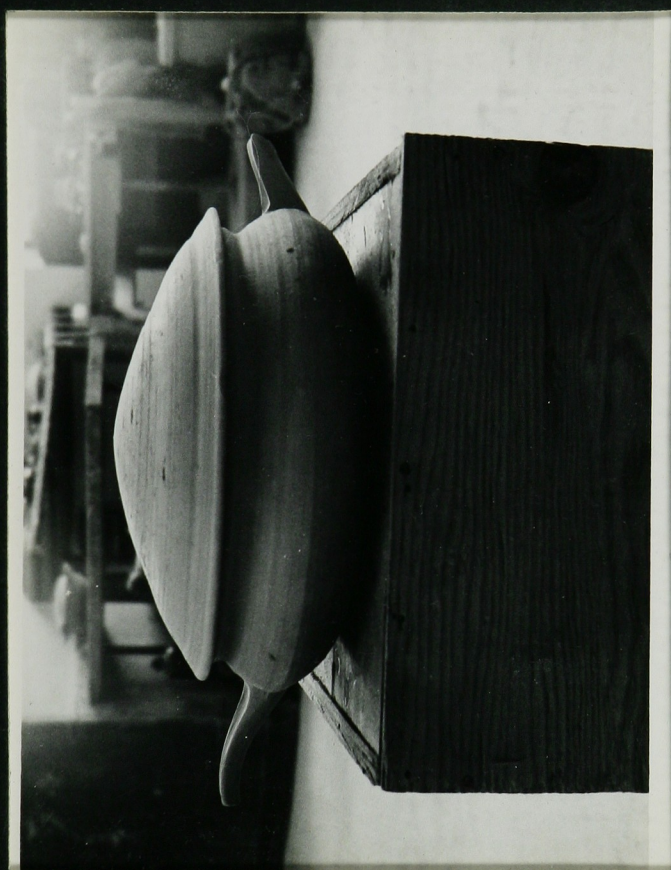
I wanted to spend more time on gravy boats and frying pans but time and circumstances didn't permit. Frans wanted me to devote the remainder of the year to large containers which I did.

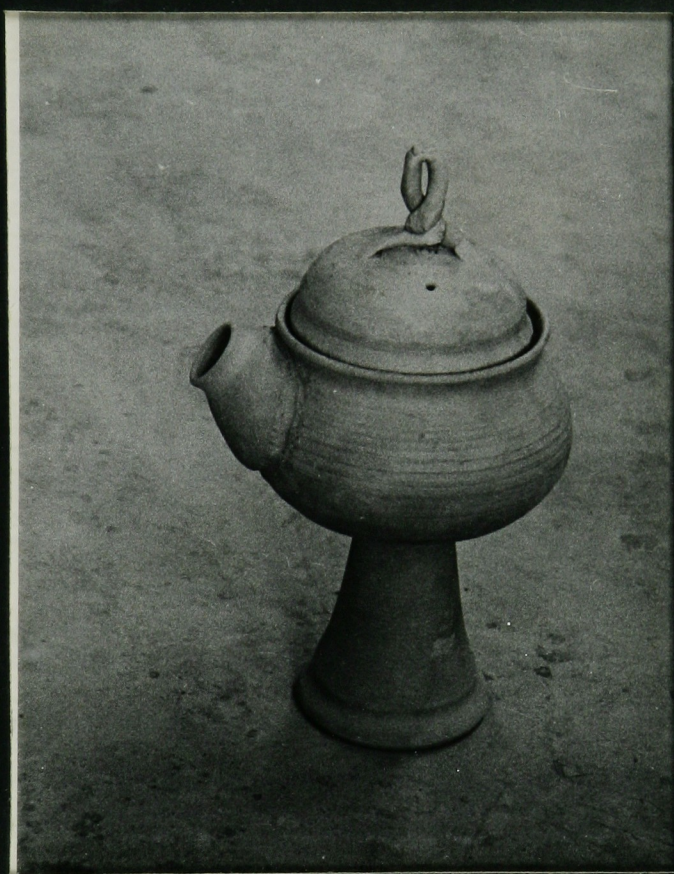
I explored the possibilities of using different shapes as one form. By combining these shapes and working with the problem of transition between them, I came up with some satisfactory results. I worked mainly with round, bloated shapes, freely thrown and freely put together. Lips and covers were adapted after the shapes were put together. A large coil was placed on the top and thrown to the pot. A hole was then cut and a cover was adapted. I was very satisfied with my results and was glad I spent my remaining time on pursuing this type of construction.

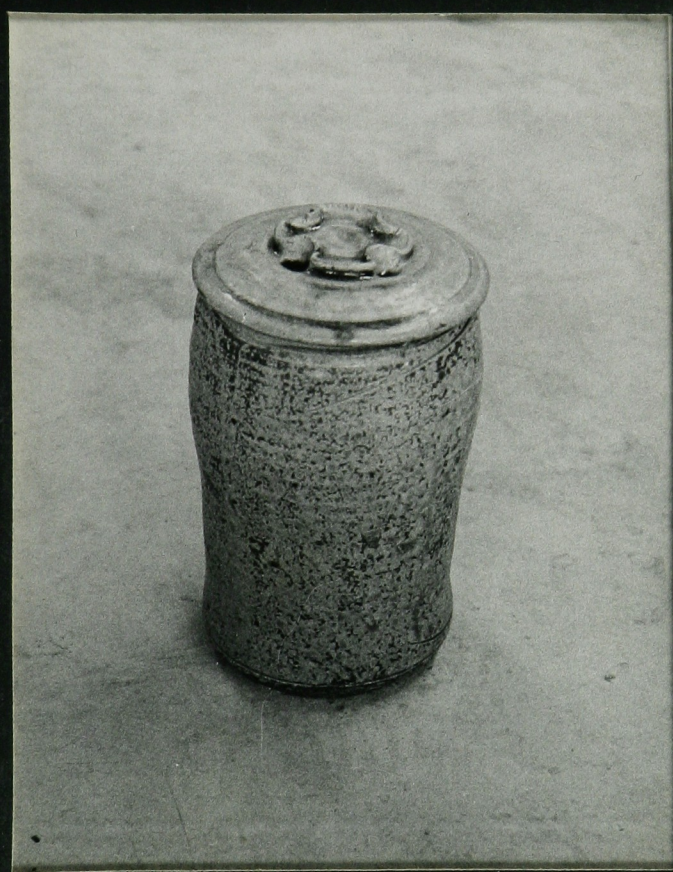
This ends a very rewarding year for me. I consider myself very fortunate to have worked with Hobart, Frans and my fellow students. I have learned a tremendous amount about my work and feel confident not only as a potter but as a person.

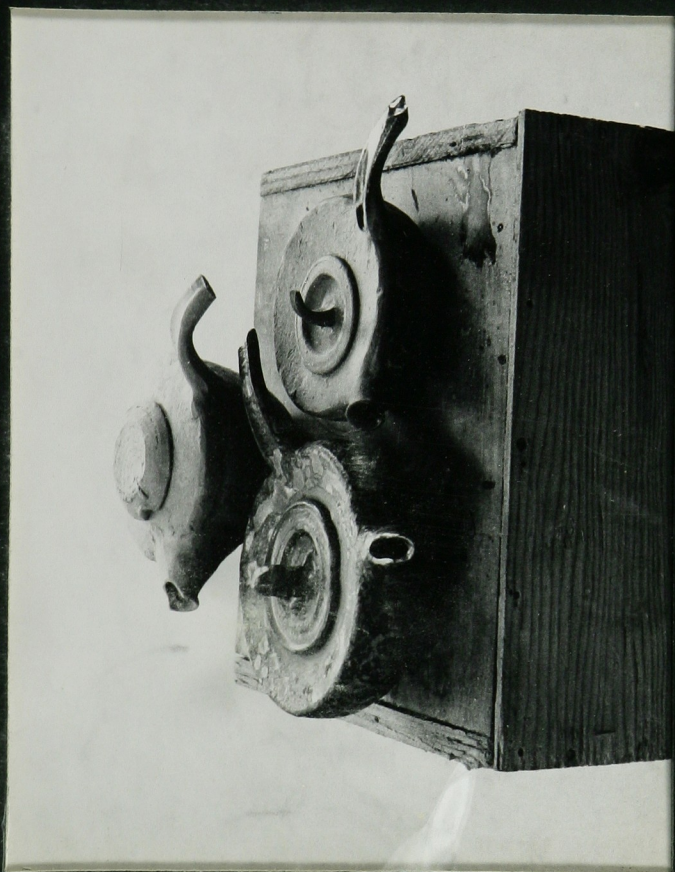
















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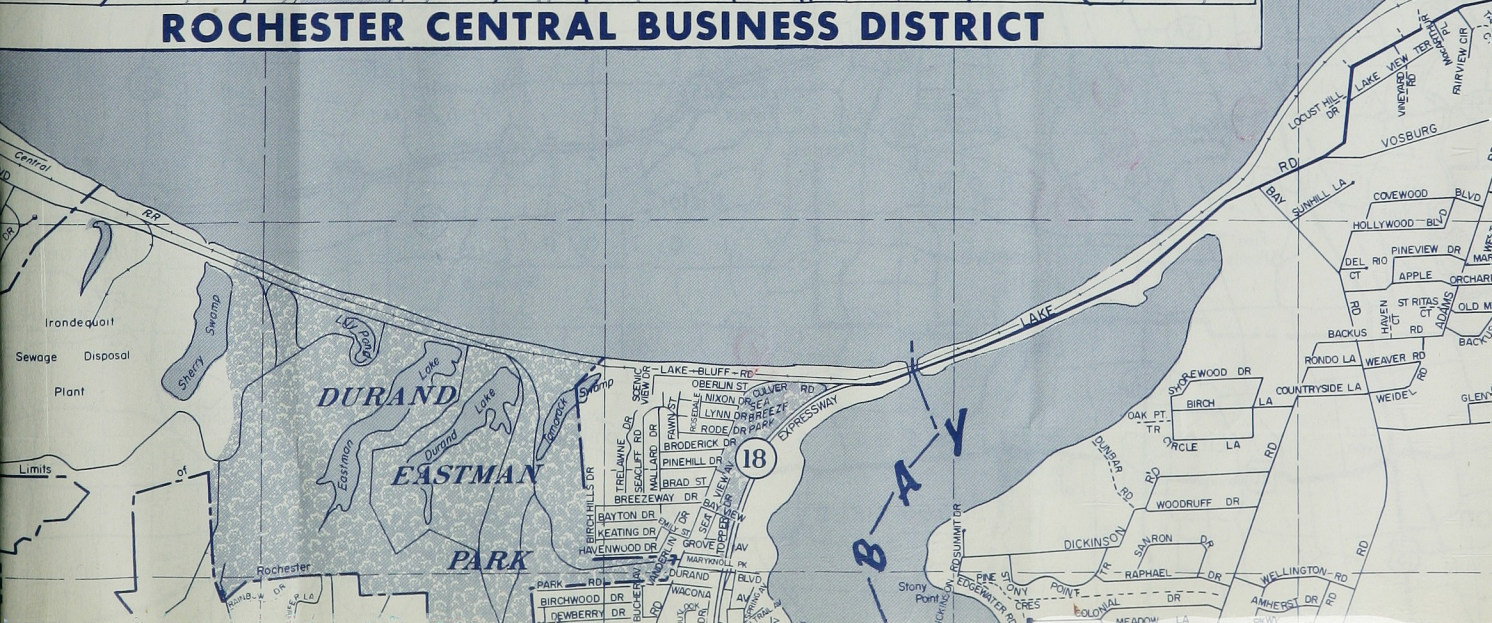
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Palusky

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33



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34



EKTACHROME
TRANSPARENCY

35



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36



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